

What you Need

Two photomultiplier tube (PMT) modules, two signal conditioners for the PMT modules, and two fiber optic adapters for the PMT modules are needed. This equipment will be used in research funded by the Fixed Wing Project.

Why You Need It

This equipment will be used to aid in characterizing the output of a flow control actuator. The unsteady jet that is produced by the actuator can oscillate at frequencies as high as several kilohertz. Obtaining information about the flowfield generated by the actuator is challenging. This system will be used to obtain time dependent information about the flowfield produced by the actuator being studied.

Suggested Vendor

Hamamatsu is the recommended vendor for PMT modules and signal conditioners. The total price for the items is \$5464.00. **The PMT module requested is model H10722-20 and the power supply is model C10709.**

The PMT modules should include high voltage power supplies and low noise amplifiers and the modules should have the following specifications

Frequency Response DC to 20 KHz
Current to Voltage factor 1V/ μ A
Spectral Response 230 nm to 920 nm
Effective area diameter of **8 mm**
Weight approximately **100 g**
PMT shall have a square cross-section, L= 22 mm
Length of PMT shall be 60 mm
Maximum output signal voltage +10 Volts
Peak Sensitivity wavelength **630 nm**

Power Supply Specifications:

Output +/-5V
Control Voltage: Variable
Control Voltage Range +0.25 to +1.8 Volts